

AMENDMENT TO THE SPECIFICATION

Please amend the specification as follows:

Replace the paragraph found at page 6, line 18 through, page 7, line 12 with the following:

As an example of another refinement to the countermeasure system associated with the second aspect of the present invention, one or both the countermeasure cartridge and the launch tube may include portions of a digital data link (e.g., for relaying flight control parameters between a logic center associated with the marine vessel and the internal control means, such as a microchip, of said countermeasure cartridge). This data link may be utilized to convey flight parameters from the marine vessel's control center (e.g., computer system) to the countermeasure cartridge. For example, these flight parameters may dictate when and/or where (in the countermeasure cartridge's flight path) one or more canards of the cartridge are activated or deployed (e.g., to at least generally assist in pitching the countermeasure cartridge). Related to these canards, the countermeasure cartridge may also be equipped with one or more spring-loaded fins toward the aft end that may deploy upon that aft portion of the countermeasure cartridge clearing the launch tube to at least assist in the desired flight characteristics of the countermeasure cartridge. The number, location, design, and orientation of the fins (if any) may vary as appropriate in other embodiments of the invention. Somewhat relatedly, the countermeasure cartridge may be equipped with an onboard gyroscopic stabilization system. This onboard gyroscopic stabilization system may be said, at least in one embodiment, to at least generally assist in controlling roll, pitch, and/or yaw (e.g., lateral angular deviation from a line of flight) of the countermeasure cartridge (e.g., via the canards) after launch.

Replace the paragraph found at page 15, line 12 through, page 16, line 2 with the following:

Figure 3 illustrates a countermeasure cartridge 50 that is at least generally disposable in the launch tube 24 of the launcher assembly 20 of Figure 2. In other words, all or part of the countermeasure cartridge 50 is positionable within the launch tube 24 (e.g., prior to launch of the cartridge 50 therefrom). This countermeasure cartridge 50 includes a nose 51 and an opposing tail 53. In addition, toward the tail 53, the cartridge includes at least one propulsion ~~module~~ means (e.g., rocket motor, impulse assembly, mortar assembly, and/or the like) 52. This propulsion ~~module~~ means 52 is generally disposed between the nose 51 and a secondary firing coil 58 associated with the tail 53 of the countermeasure cartridge 50. Between this secondary firing coil 58 and the propulsion ~~module~~ means 52 is a fin cup 60 equipped with a plurality of spring-loaded fins 57a, 57b. These fins 57a, 57b preferably deploy outward in the general directions indicated by arrows 92a, 92b (respectively) upon that portion of the countermeasure cartridge 50 exiting or clearing the launcher assembly 20. These fins 57a, 57b, may be said to at least generally assist in stabilizing the flight path of the countermeasure cartridge 50 after launch of the same.

Replace the paragraph found at page 16, lines 3 through 13 with the following:

An obturator 62 is at least generally disposed between the propulsion ~~module~~ means 52 and the fin cup 60. This obturator 62 may be said, at least in one embodiment, to substantially prevent escape of exhaust plume gas (exiting the fin cup 60) from the launch tube 24 until the cartridge 50 (or at least the obturator 62 thereof) has left the launch tube 24. Accordingly, employment of this obturator 62 in the design of the countermeasure cartridge 50 at least generally enhances initial launch thrust provided by the propulsion ~~module~~ means 52 and may be said to at least generally promote a zero-twist rifling feature of the countermeasure system¹². In the case that the countermeasure cartridge 50 employs rocket propulsion, the same may be equipped with one or more supplemental thrust vector control vanes 55 disposed toward the aft end 53 of the cartridge 50 to at least generally affect the flight path of the countermeasure cartridge 50 by directing at least some of an exhaust plume generated from the rocket propulsion.

Replace the paragraph found at page 16, lines 14 through 21 with the following:

Between the propulsion ~~module~~ means 52 and the nose 51, the countermeasure cartridge 50 also includes at least one payload section 54 for at least temporarily containing (e.g., until deployment of the same) one or more appropriate decoys (not shown), such as, but not limited to, infrared and/or radar-reflecting decoys. Herein, “decoy” refers to any device utilized to at least generally deceive, distract, divert, lead, and/or lure away an incoming threat (e.g., of the marine vessel 10), as well as any device utilized to destroy or deactivate such an incoming threat. Release or deployment of one or more of these decoys from the payload section 54 may be accomplished in any of a number of appropriate manners known in the art.

Replace the paragraph found at page 17, lines 13 through page 18, line 2 with the following:

Between the payload section 54 and the nose 51 of the countermeasure cartridge 50 of Figure 3 is an appropriate internal control module means 56. This internal control module means 56 preferably includes an appropriate microprocessor control unit 61, one or more appropriate canard control modules 63, and at least one timing device 67 (e.g., a digital timing device such as Airtronic's AOTC Cube/Relay Timer). Moreover, as an optional feature, the countermeasure cartridge 50 may include one or more supplemental thrusters 72 disposed toward the nose 51 of the countermeasure cartridge 50. In Figure 3, the countermeasure cartridge 50 is shown equipped with one such supplemental thruster 72 at least generally disposed between the nose 51 and the first canard 64. The supplemental thruster(s) 72 may be said to at least generally assist in the alteration and/or maintenance of a flight path of the countermeasure cartridge 50 after launch. It should be noted that any appropriate number and location(s) of the supplemental thruster(s) 72 may be appropriate based on, inter alia, desired flight characteristics of the countermeasure cartridge 50.